



NYS Net Metering FAQ - Residential



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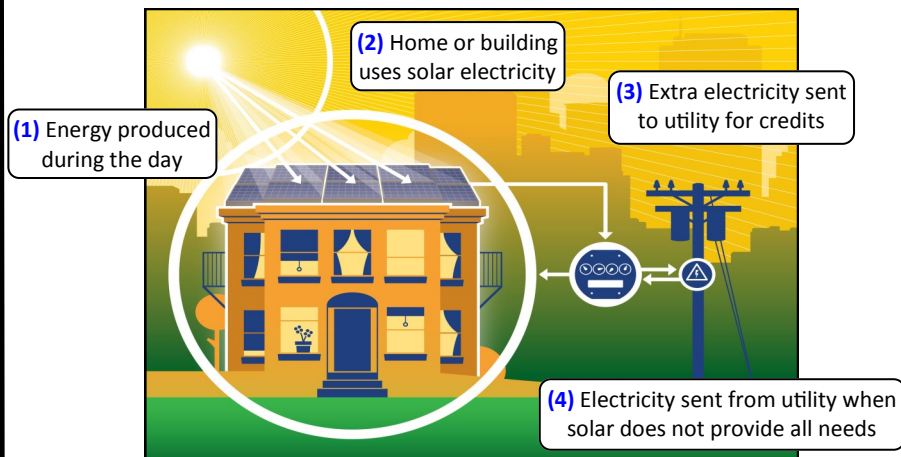
Sustainable CUNY Background

Sustainable CUNY is implementing [NYSolar Smart](#), a strategic plan supported by the U.S. Department of Energy and New York State initiatives aimed at lowering the 'soft costs' of installing solar across the state. Under this program, Sustainable CUNY formed a **NYS Net Metering & Interconnection (NMI) Working Group** that includes all of New York's major electric utility companies. This FAQ was developed by the NMI Working Group to increase public understanding of net metering for residential electric customers of Central Hudson Gas & Electric, Consolidated Edison, PSEG Long Island, National Grid, New York State Electric & Gas, Orange & Rockland, and Rochester Gas & Electric.

How Net Metering Works

Net metering allows customers who generate their own electricity from alternative energy systems, such as solar, to transfer electricity they do not use back into the grid in exchange for credits on their utility bills.

- During the day, a solar photovoltaic (PV) system produces electricity for immediate or 'real time' use on the home or building.
- Any extra energy not being consumed at the site (unless it has a battery storage system) is sent to the utility grid.
- Energy is supplemented from the utility when your PV system does not supply your entire daytime needs or at night when it is not producing.
- Any credits earned during a billing cycle, offset electricity usage at other times.



Solar Electric vs Solar Thermal

Solar electric or PV systems are eligible for net metering. They produce electricity measured in kilowatt-hours or kWh, which offsets your electric bill.



Solar thermal or hot water systems use the sun to heat water and can offset usage of your existing water heater. They are not eligible for net metering because they do not produce electricity, but they can still create savings on your energy bills.

What system size should I install?

A solar contractor will size a system that will work best for your home or building based on your energy usage, roof or property space, financial investment, and sustainability goals. In New York, residential PV systems that are net metered are limited to 25 kW (kilowatts) per electric meter. Farms utilizing a residential electric service are limited to 100 kW.

When your system generates more electricity than your home is using in a billing cycle, credits can offset the next billing cycle at the full retail value. It's usually not recommended to install a system that will produce more electricity than you use in a typical year. This is because energy not consumed after a year is reimbursed to you by the utility at the 'avoided cost of power' rate, not the retail rate you are credited between other billing cycles. The 'avoided cost of power' rate varies depending on the utility, market trends, and location in the state. It is generally half to two-thirds of the retail rate, meaning you would receive less value for any credits produced in excess of your annual energy consumption.

The New York State Energy Research & Development Authority (NYSERDA) offers incentives to solar customers through the NY-Sun Incentive Program. The program does not allow a system to be sized more than 110% of your previous 12 months usage history (per electric meter) to qualify. New construction projects without a full 12 months usage history are based on 110% of the projected kWh usage.

How do I know my 12 months usage history?

Visit your electric utility's website, and create an account if you have not done so already. You will be able to access your usage history from there.

For more information on solar and net metering, visit your utility's website under the distributed generation page.

Sustainable CUNY
Sustainablecuny.org

Central Hudson
centralhudson.com

Con Edison
coned.com

PSEG-LI
psegliny.com

National Grid
nationalgridus.com

NYSEG
nyseg.com

Orange & Rockland
oru.com

Rochester G&E
rge.com

Residential Billing

The following summary applies to utility customers on a residential rate classification, including most multi-family buildings. Solar owners with net metering receive electric bills that detail the current kWh credits or charges for the billing cycle. In addition to kWh usage, all utility bills include a customer service charge for using the utility grid and billing system. The charge is referred to as 'Basic Service Charge or 'Customer Charge' depending on the utility. It cannot be offset with solar credits.

What happens if the PV system produces less energy than my home uses?

Your bill will look almost the same except the kWh usage and charges will be less than you had without solar.

What happens if the PV system produce more energy than my home uses?

- ◆ KWH credits are indicated on the bill with a (—) negative sign
- ◆ These excess credits are rolled over to the next bill until they are used
- ◆ You only pay a customer service charge for using the utility grid

PV PRODUCES LESS	
Used from utility	200 kWh
Sent to utility	150 kWh
Billed for	50 kWh
Credits = 0 kWh	

PV PRODUCES MORE	
Used from utility	100 kWh
Sent to utility	200 kWh
Billed for	0 kWh
Credits = 100 kWh	

Example Net Metering Bill With A Credit *(actual bill will look different)*

July reading (Actual)	56351	
June reading (Actual)	-56451	
Total Usage KWH 32 Days	-100	Credit
Net Metering Summary		
Prior Credit	-50	
Actual Metered Kwh	-100	
New Cumulative Credit	-150	
Billed KWH	0	
Anniversary Month	April	
Delivery Charges		
Basic Service/Customer Charge		\$19.47 Cannot be offset with solar
Delivery Charge	0 KWH @ 0.XXX	.00
NY State Assessment	0 KWH @ 0.XXX	.00
SBC/RPS Charge	0 KWH @ 0.XXX	.00
Government surcharges - Taxes		.50
Total Delivery Charges		\$19.97
Supply Charges		
Electricity Supply	0 KWH @ 0.XXX	.00
Total Supply Charges		\$0
CURRENT ELECTRIC CHARGES		\$19.97 Amount Due

Refund Check

If you have credits remaining after a year, the utility will send you a refund check. The credits are converted to a \$ amount at the 'avoided cost of power' rate. This time period is called the 'Annual Reconciliation' or 'Anniversary Month.' The month can only be changed one time by contacting the utility.

Please discuss the ideal 'Anniversary Month' with your installer based on your usage patterns and PV production. It is best for credits to offset a higher month's usage at the full retail value rather than be refunded at the lower, 'avoided cost of power' rate.

Solar & 'Time of Use' Rates

Time of Use (TOU) is a rate option available to all utility customers. Each utility has a set of peak hours such as '8am to midnight' or '9am to 9pm'; times when many customers are using a lot of energy. If you have selected the TOU option, kWh charges for using electricity are lower than the standard rate during off-peak hours and higher during peak hours.

For some solar customers, it is not economical to be on the TOU option because credits for excess electricity must stay in the period they were produced. This means credits generated during peak hours in the day cannot offset usage at night (off-peak). The refund check for excess credits is always based on the utility's 'avoided cost of power.' Nonetheless, TOU with solar could still be a financially viable option in certain circumstances. Please research your utility's peak hours, TOU rules, and carefully assess your usage patterns before selecting this rate.

Steps To Going Solar

- 1) **Contact a solar installer** - Receive at least a few different quotes to compare pricing, customer references, and financing options. For a list of participating NY-Sun Incentive Installers, go to: ny-sun.ny.gov/pv-installers
- 2) **Sign utility interconnection (net metering) paperwork** - Your installer will help determine what paperwork needs to be signed to notify your utility and municipal building department you are going solar. Net metering applications are free for systems under 25 kW.
- 3) **Utility installs a net meter** - Your electric meter will be switched to measure energy flowing both ways. This usually occurs within 2-4 weeks of the utility approving the net metering application, and can happen before the solar install.
- 4) **After the solar install** - Please wait for interconnection approval from your utility to turn on the solar system. This is usually an approval letter or email. Before your utility can grant approval, your installer must first obtain all jurisdictional permits and inspections, and provide the utility with a completed verification test form.
- 5) **Turn on the solar system & generate renewable energy!** Please be aware meter readings are sometimes estimated when the utility cannot access the meter. Energy savings may not appear until meters can be read.

